CLAIMS

What is claimed is:

1   1.   An image printing device comprising:

2   an input for receiving an image data signal in said image printing

3   device; and

4   a processor in said image printing device for receiving and

5   processing said image data signal;

6   wherein

7   said image data signal contains data specifying location data for

8   each dot of which an image described by said image data signal is constituted,

9   and

10   said processor determines a size for each said dot based on dot

11   density data derived from said location data of said image data signal.

1   2.   The image printing device of claim 1, further wherein said

2   processor is programmed to count a number of dots specified by said location

3   data for printing in a square matrix centered on a particular dot for which dot

4   size is to be determined and to calculate a dot density estimation based on said

5   number of dots in said square matrix.

1   3.   The image printing device of claim 2, wherein a dot size of

2   said particular dot is determined based on said dot density estimation.

1   4.   The image printing device of claim 2, wherein said square

2   matrix has five pixels to a side.

1   5.   The image printing device of claim 2, wherein said

2   processor, in calculating said dot density, weights each counted dot based on

3   proximity to a center of said square matrix.

1 6.   The image printing device of claim 1, wherein said printing
2 device prints said image using said location data in said image data signal and
3 dot size data determined by said processor.

1 7.   The image printing device of claim 1, wherein said printing
2 device is a laser printer.

1 8.   The image printing device of claim 1, wherein said printing
2 device is an ink-jet printer.

1 9.   The image printing device of claim 1, wherein said printing
2 device is a fax machine.

1 10.   A method of printing an image with an image printing device
2 based on an image data signal that comprises data specifying print location data
3 for each dot that constitutes said image, said method comprising determining a
4 size for each said dot based on said print location data of said image data
5 signal.

1 11.   The method of claim 10, wherein said determining a size for
2 each said dot further comprises, determining a density of dots around that dot
3 for which size is being determined and determining said size for that dot based
4 on said density.

1 12.   The method of claim 10, further comprising:
2 counting a number of dots specified by said print location data for
3 printing in a square matrix centered on a particular dot for which dot size is to
4 be determined; and
5 calculating a dot density estimation based on said number of dots
6 in said square matrix.

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1   13.   The method of claim 12, further comprising determining a

2   dot size of said particular dot is based on said dot density estimation.

1   14.   The method of claim 12, further comprising defining said

2   square matrix as having five pixels to a side.

1   15.   The method of claim 12, wherein said calculating a dot

2   density estimation further comprises weighting each counted dot based on

3   proximity to a center of said square matrix.

1   16.   The method of claim 10, further comprising printing said

2   image with said printing device using said location data in said image data signal

3   and dot size data.

1   17.   An image printing device comprising:

2   means for receiving an image data signal in said image printing

3   device; and

4   processor means in said image printing device for receiving and

5   processing said image data signal, wherein said image data signal contains data

6   specifying location data for each dot of which an image described by said image

7   data signal is constituted,

8   said processor means comprising means for determining a size for

9   each said dot based on dot density data derived from said location data of said

10   image data signal.

1   18.   The image printing device of claim 17, further wherein said

2   processor means comprises:

3   means for counting a number of dots specified by said location

4   data for printing in a square matrix centered on a particular dot for which dot

5   size is to be determined; and

6   means for calculating a dot density estimation based on said

7   number of dots in said square matrix.

1   19.   The image printing device of claim 18, wherein a dot size of
2   said particular dot is determined based on said dot density estimation.

1   20.   Computer-readable instructions stored on a media for
2   recording computer-readable instructions, wherein said instructions cause a
3   processing device, that receives an image data signal comprising data specifying
4   print location data for each dot that constitutes an image, to determine a size
5   for each said dot based on said print location data of said image data signal.

1   21.   The computer readable instructions of claim 20, wherein
2   said instructions further cause said processing device to:
3   determine a density of dots around that dot for which size is being
4   determined; and
5   determine said size for that dot based on said density.

1   22.   The computer readable instructions of claim 20, wherein
2   said instructions further cause said processing device to:
3   count a number of dots specified by said print location data for
4   printing in a square matrix centered on a particular dot for which dot size is to
5   be determined; and
6   calculate a dot density estimation based on said number of dots in
7   said square matrix;
8   wherein said size for that particular dot is determined based on
9   said calculated dot density.